IN THE CLAIMS:

1-13. **(Cancel).**

14. **(New)** A combination of a cylinder, a piston which moves in reciprocating fashion within an interior of the cylinder along a path of motion between a lower dead end and an upper dead end, and a monitoring apparatus for detecting variations in said path of motion over time due to wear; said monitoring means comprising an indicator means at an end face of said piston, a sensor means recessed within said cylinder so as to be offset by a lateral distance "a" from said indicator means, and a cover means which seals said sensor means relative to the interior of said cylinder, said sensor means detecting wear by sensing changes in said lateral distance "a" over time.

15. **(New)** A combination according to claim 14, wherein said piston includes rings which wear against an interior of said cylinder.

16. **(New)** A combination according to claim 14, wherein said cylinder includes a cylinder head in which said sensor means is recessed.

17. **(New)** A combination according to claim 16, including a measuring cartridge mounted in said cylinder head, said sensor means being positioned within said measuring cartridge, and wherein said indicator means comprises a measuring block connected to said piston and an indicator unit extending away from said measuring block, said

indicator unit extending into said measuring cartridge adjacent said sensor when said piston is at said upper dead end.

18. **(New)** A combination according to claim 17, including a piston rod which is connected to said piston and extends therethrough to an end facing said sensor means, said measuring block being connected to said end of said piston rod.

19. **(New)** A combination according to claim 17, wherein said measuring cartridge includes a tubular pickup element which sealingly contacts said cylinder head, and wherein said cover means comprises a diaphragm which covers said sensor means and seals against an inside of said tubular pickup element, said diaphragm providing a channel in which said indicator unit can extend.

20. **(New)** A combination according to claim 19, wherein said measuring block has a flat top surface which faces said sensor means and is perpendicular to an imaginary line which extends from said top surface to said sensor means.

21. **(New)** A combination according to claim 20, wherein said diaphragm is made of a fiber-reinforced synthetic material.

22. **(New)** A combination according to claim 16, including a sensor mount sealingly positioned in said cylinder head, said sensor mount defining a blind bore facing said interior of said cylinder, wherein

said sensor means comprises a sensor element in said sensor mount laterally of said blind bore, and wherein said indicator means comprises a cylindrical indicator unit attached to said piston so as to extend into said blind bore when said piston is at said upper dead end.

23. **(New)** A combination according to claim 22, including a piston rod which is connected to said piston and extends therethrough to an end that faces said sensor elements, and wherein said cylindrical indicator unit is attached to said end of said piston rod.

24. **(New)** A combination according to claim 16, including a sensor mount sealingly positioned in said cylinder head, wherein said sensor means comprises a plurality of circumferentially-positioned sensor elements in the sensor mount, and wherein said indicator means comprises a blind bore in said end face of said piston.

25. **(New)** A combination according to claim 24, including a piston rod which is connected to said piston and extends therethrough to an end that faces said sensor elements, and wherein said blind bore is formed in said end of said piston rod.

26. **(New)** A combination according to claim 16, including a sensor mount sealingly positioned in said cylinder head, wherein said sensor means comprise a plurality of sensor elements in said sensor

mount, and wherein said indicator means comprises a magnetic element mounted in said end face of said piston.

27. **(New)** A combination according to claim 26, including a piston rod which is connected to said piston and extends therethrough to and end which faces said sensor elements, said magnetic element being mounted in said end of said piston rod.

28. **(New)** A combination according to claim 27, wherein a first of said sensor elements is a magnetic field sensor for detecting magnetic field lines from said magnetic element and a second of said sensor elements is an eddy current sensor for detecting a distance to said end face of said piston.

29. **(New)** A combination according to claim 14, wherein said cylinder is horizontally mounted and said sensor means comprises a plurality of vertically-spaced sensor elements.

30. **(New)** A combination according to claim 14, including an evaluation unit connected to said sensor means.

31. **(New)** A combination according to claim 14, including a piston rod which extends through and is connected to said piston.